

73rd MORSS CD Cover Page

712CD

For office use only 41205

UNCLASSIFIED DISCLOSURE FORM CD Presentation

21-23 June 2005, at US Military Academy, West Point, NY

Please complete this form 712CD as your cover page to your electronic briefing submission to the MORSS CD. Do not fax to the MORS office.

<u>Author Request</u> (To be completed by applicant) - The following author(s) request authority to disclose the following presentation in the MORSS Final Report, for inclusion on the MORSS CD and/or posting on the MORS web site.

Name of Principal Author and all other author(s): Capt David Koewler

Principal Author's Organization and address:

Air Force Studies and Analyses Agency 1570 Air Force Pentagon Washington DC, 20330,1570 Phone:_703-588-0802

Fax:__703-696-8738

Email:_David.Koewler@pentagon.af.mil

Original title on 712 A/B:_Air Force Warfighting Headquarters (WFHQs) & Combat Analyst Update								
Revised title:								
Presented in (input and Bold one): (WG	. CG	Special Session	Poster, Demo, or Tutorial):					

This presentation is believed to be: UNCLASSIFIED AND APPROVED FOR PUBLIC RELEASE

Report Documentation Page				Form Approved OMB No. 0704-0188			
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.							
1. REPORT DATE 01 JUN 2005		2. REPORT TYPE N/A		3. DATES COVERED			
4. TITLE AND SUBTITLE					5a. CONTRACT NUMBER		
Air Force Warfighting Headquarters (WFHQs) & Combat Analyst			5b. GRANT NUMBER				
Update				5c. PROGRAM ELEMENT NUMBER			
6. AUTHOR(S)				5d. PROJECT NUMBER			
					5e. TASK NUMBER		
					5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Air Force Studies and Analyses Agency Washington DC, 20330					8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)			
					11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited							
13. SUPPLEMENTARY NOTES See also ADM201946, Military Operations Research Society Symposium (73rd) Held in West Point, NY on 21-23 June 2005., The original document contains color images.							
14. ABSTRACT							
15. SUBJECT TERMS							
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF	18. NUMBER	19a. NAME OF		
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	ABSTRACT UU	OF PAGES 25	RESPONSIBLE PERSON		

Headquarters U.S. Air Force

Integrity - Service - Excellence

Air Forces Warfighting Headquarters (WFHQs) & Combat Analyst Update



Capt David Koewler

AFSAA/SACO

June 05



David.Koewler@pentagon.af.mil



Agenda

WFHQ

- Brief Overview
- Highlight how OR analysts are integrated

Combat Analyst

- Define Combat Analyst
- History of Operations Research
- Career field Functional Management
- Milestones
- UTCs developed
- Abbreviated Example
- Current Deployment Requirements



WFHQ Construct

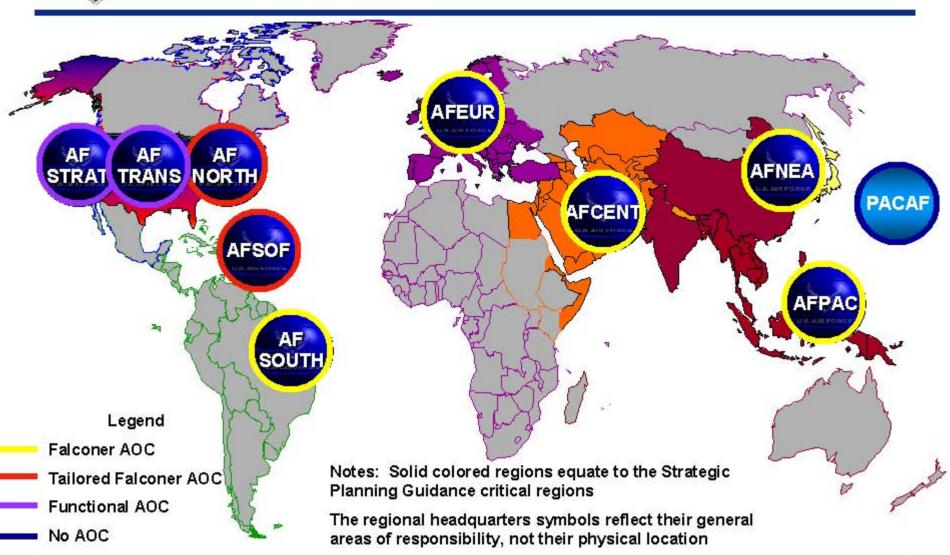


Figure 1



WFHQ Basic Template

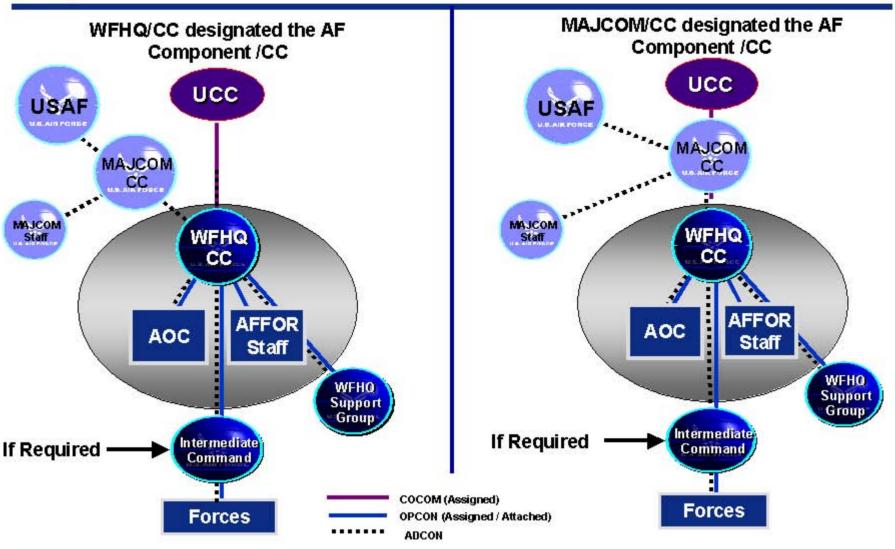


Figure 2



WFHQ Transition

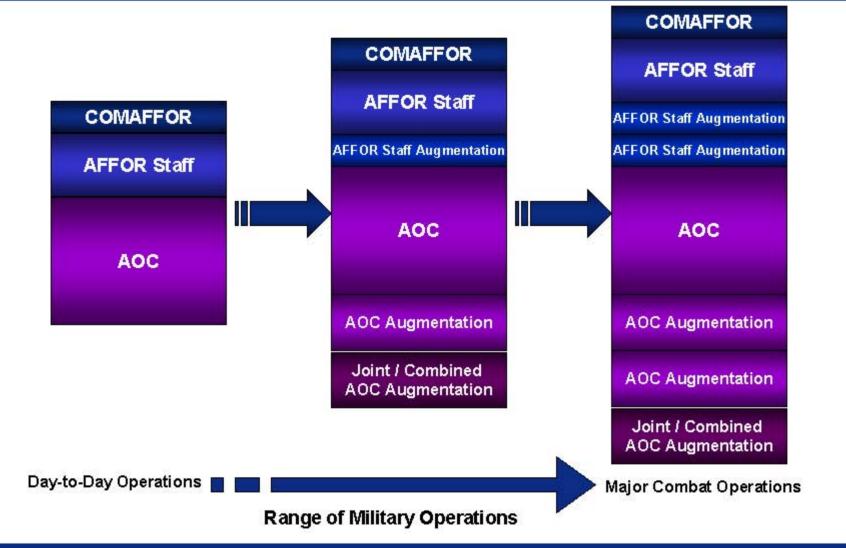


Figure 3



WFHQ Internal Structure

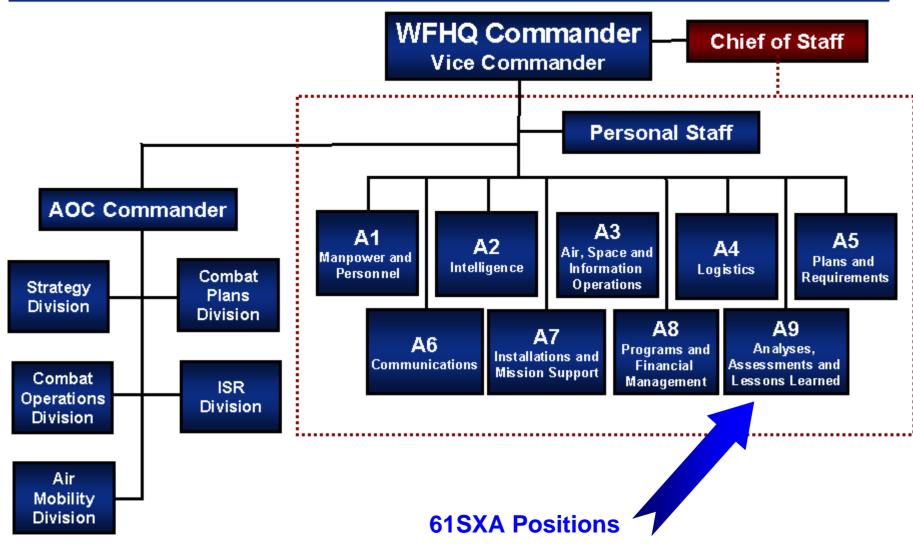


Figure 4



AOC Structure

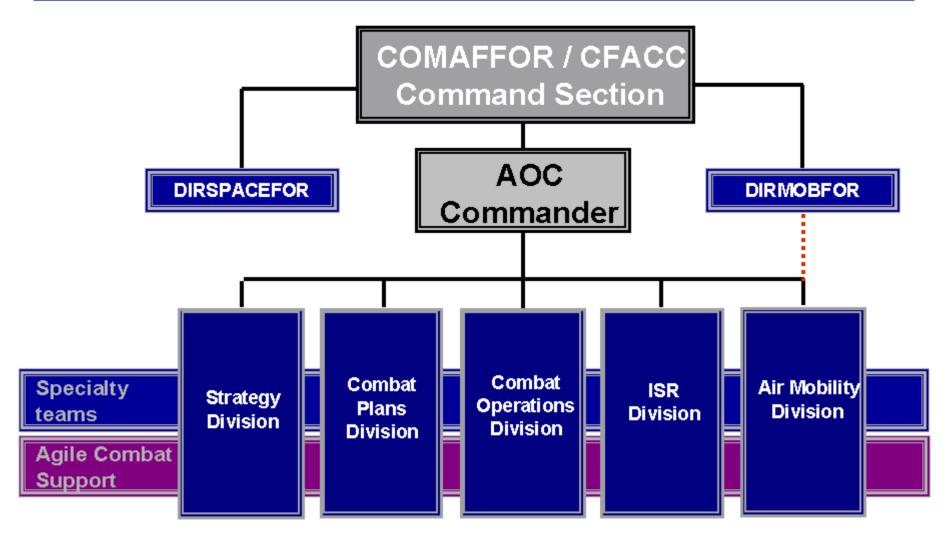


Figure 5



Strategy Division

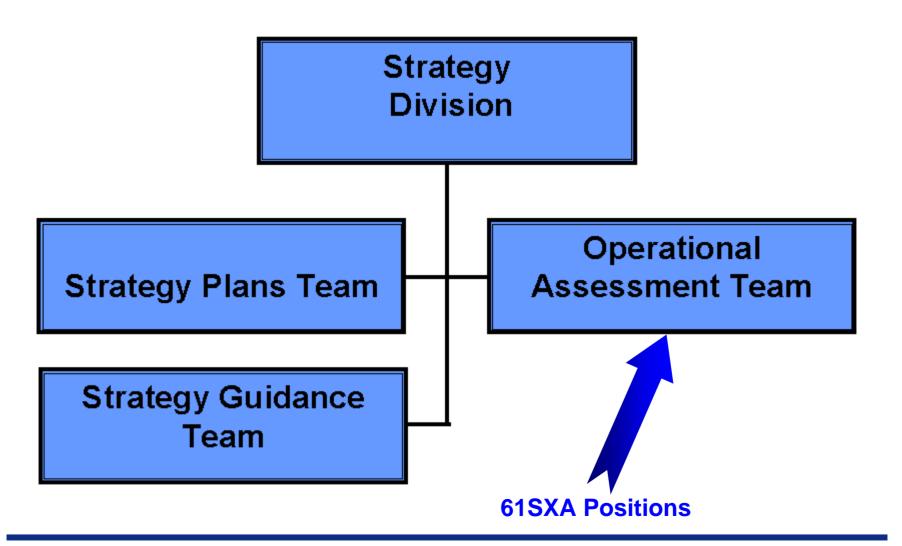
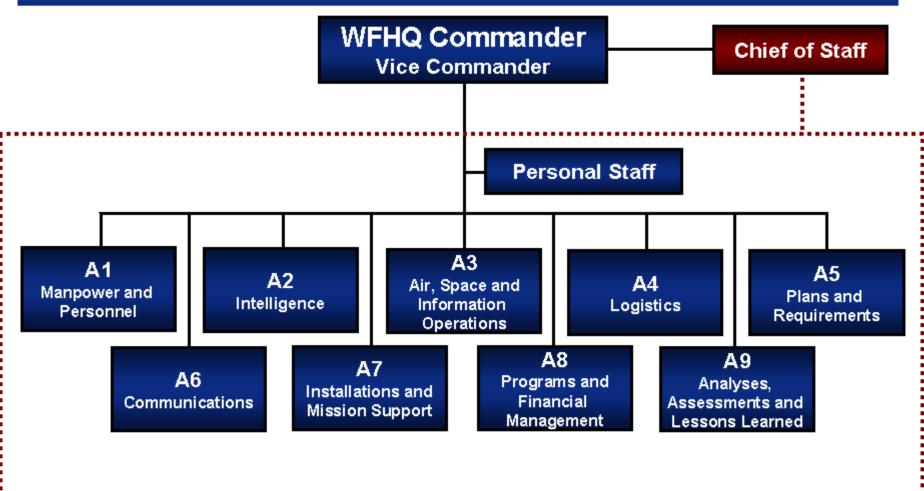


Figure 6



AFFOR Staff Structure



Note: The Chief of Staff (CoS) is a member of the command staff and coordinates and directs the day-to-day activities of the AFFOR staff



Combat Analyst

- Personnel trained in Operations Research (OR)
- Deploy to support AOCs and warfighting staffs
- Improve commanders decision making process
 - Integrate knowledge across stove-piped systems and processes
 - Provide unique perspective & problem solving skills
- Discover problems not recognized as significant
- Improve implementation of new warfighting capabilities
- Guide assessment of ongoing operations

I want my ORs (61SAs) to be ops line officers and operational, rather than pure S&Es."

SECAF - 4 Jun 03



Not a new idea...

History of Operations Research

WWII - Birth of OR

■ 1939 Air Ministry at Bawdsey Research Station (Great Britain)

 Assigned groups of scientists to military staffs to serve as scientific advisers concerning strategic and tactical problems

Collected and analyzed statistical results from military

operations and made recommendations

Results

- Devised new tactical rules and applications of weapon systems
- Supported military decisions on combat operations, weapon employment and design

Science at War





Developing Combat Analysts

Through Functional Management of 61SAs

'Analysts will be key in providing essential information to future CFACCs.'
Gen Moseley, CFACC OPERATION IRAQI FREEDOM



Force Development: Recruit, train, and develop analysts with the objective of supporting the AF operational and warfighting mission requirements

Operational Experience: Analysts at Wings, NAFs, MAJCOMs, and Combatant Commands to prepare and train for combat contingency operations

Objective:

Enhance USAF planning and execution of full spectrum Warfare using Operations Research Analysts as force multipliers on the operational team <u>Warfighting Capability:</u> Ensure processes, policies, and tools are in place that support development of a quick-turn analysis capability required to support combat operations



Milestones

Integrate Analysts into warfighting staffs

WFHQ Construct

- Mandatory A-9
- Core AOC manning: 1-2 61SXA positions
- Defining A-9: Core manning, Organization, AFOTTPS...
- Help stand up new A-9s
- 61SXA Guard and Reserve positions to Augment AOC
- Involved in Operations Assessment Task Force
- Other Analyst positions: Wings, Joint, ...





Milestones

Standardizing Deployable Combat Analyst

Combat Analyst UTC

- Standard UTC: 9ASC1, 9ASC5, & 9ASC7
- Standard UTCs used for deployment requirements
- Official AF FAM Posturing & Coding Guidance for 61SXA
- Posture <u>ALL</u> deployable 61SXAs in standard UTCs
- Standardized Equipment

Institutionalize process to meet deployment requirements

- **☐** Identify MAJCOM FAMs and POCs
- Formal process to request volunteers
- Schedule across MAJCOMs for AEF deployment taskings
- Deploy civilians to meet some requirements
- Identify units with wartime taskings



Milestones Training

AOC exercises

- Identify AOC exercises to support
- Process to augment exercise 61SXA requirements
- Improve Operations Assessment play in exercises

In-Residence Courses

- Identify applicable courses
- Increase available course slots for 61SXA attendance
- Identify relevant Online Resources
- Develop 61SXA specific pre-deployment training





Milestones Other

- **Operations Assessment cross talk for 61SX**
 - Informal process
 - ☐ AFORS breakout
- Reachback process
 - Informal
 - **Formal**
- Analyst 101 Course
- Define Analyst Toolkit
- AOC Operations Assessment Tool Development
- Increase UMD Security Clearance requirements





Combat Analyst UTC

- 61SXA positions in AOC UTCs (7FVX1,7FVX5)
 - Justification for positions at NAF level
 - Provide core AOC analyst capability
- Develop initial "building block" UTCs
 - Smaller career fields need the flexibility of smaller UTCs
 - Utilize Combat Analysts beyond the AOC
 - JTF, CPA, TFEL like operations
 - Allow limited substitution from other career fields
 - Current requirements can be met within the career field
 - Scientist functional area for coding: "9AS__"
- Combat Analyst UTCs
 - 9ASC1 Combat Analyst Officer
 - 9ASC5 Senior Combat Analyst
 - 9ASC7 Director Combat Analyses



Abbreviated Example: Airpower Distribution

- Question: Are CFACC assets postured to support Afghan presidential election security?
- Data Req'd: Current beddown, total coalition assets available, capabilities of all assets (surge rates), limfacs (tankers), areas of greatest concern
- Data Avail: Current beddown, CFACC assets available, speculated tanker support, predicted areas of greatest concern
- Analysis:
 - Pattern analysis of recent attack trends (Falconview)
 - Distances from bases to areas of concern ⇒ vul times
- Reporting:
 - Compare current situation to anticipated situation
 - Provide options to CFACC for courses of action



As of:

Deployed AF Combat Analyst OEF, OIF & ONE Support

Program & Contracting Office (PCO) Support U.S. Embassy in Iraq

- GS-14: Chief of Strategic Analyses
- Re-build a country and economy

Outcomes and reprogramming impacts of the \$18.4B in reconstruction

CAOC - Qatar

Work for Strategy Div Chief

- O-3 & O-4 : Ops Assessment
- Assess current aerial strategy
- MOEs for operational objectives

Combined air support for multinational ground forces and Iraqi government

Multi-National Forces - Iraq

Work for C3 Effects – Information Ops

- O-2 : Effects Analyst
- O-4 & O-5 (1 Year): Effects Analyst
- Commander's Assessment Board

Interpret polls and demographics to gauge progress on the "perception war"

CONUS Region – Tyndall AFB

Work for CONR Assessment Team

- O-3: Operations Assessment
- Assess current operations
- Homeland Defense

Assessment that looks at the bigger picture to include all divisions



Conclusion

- WFHQ
 - OR Analysts integrated with warfighting staffs
- Career field Functional Management
 - Combat Analyst trained to meet the COCOM requirements
- Current Deployment Requirements
 - Supporting OEF, OIF & ONE



Questions?



9ASC1 – Combat Analyst Officer

■ Manpower: 1 AFSC: 061S3A Grade: O-3

MISCAP: THE COMBAT ANALYST OFFICER (CAO) USES QUANTITATIVE AND QUALITATIVE PROBLEM SOLVING EXPERTISE TO PROVIDE QUICK TURN ANALYSIS FOR OPERATIONAL QUESTIONS AND PROBLEMS. ASSESSES CURRENT OPERATIONS TO FIND TRENDS AND INDICATORS THAT PROVIDE THE DECISION MAKERS WITH CRITICAL INSIGHTS TO DETERMINE AND MOLD FUTURE OPERATIONS. FAMILIAR WITH AIR OPERATIONS CENTER (AOC) PROCESSES AND THE SPECTRUM OF AIR FORCE OPERATIONS. EXPERT IN OPERATIONS ASSESSMENT TECHNIQUES AND TOOLS, CAN INCLUDE: STATISTICS, PROBABILITY MODELS, HEURISTICS, SIMULATION, AND OPTIMIZATIONS. CAN OPERATE WITHIN THE AIR OPERATION CENTER (AOC), COMBINED JOINT TASK FORCE (CJTF), OR OTHER OPERATIONAL ORGANIZATIONS. CAN BE USED TO AUGMENT UTCS 7FVX1 / 5. 61S3A CAN BE SUBSTITUTED WITH 61S4 WITH A SCIENTIFIC ANALYST BACKGROUND AS A 61SXA.



9ASC5 – Senior Combat Analyst

■ Manpower: 1 AFSC: 061S4 Grade: O-5

MISCAP: THE SENIOR COMBAT ANALYST (SCA) PROVIDES THE LEADERSHIP FOR A COMBAT ANALYST TEAM AND/OR IS THE INTERFACE WITH THEATER LEVEL OR OTHER SENIOR-LEVEL STAFF FOR QUANTITATIVE AND QUALITATIVE OPERATIONS ASSESSMENTS. EXPERIENCED IN ANALYZING A WIDE RANGE OF AIR FORCE AND JOINT OPERATIONS. CAN OPERATE WITHIN THE AIR OPERATION CENTER (AOC), COMBINED JOINT TASK FORCE (CJTF), OR OTHER OPERATIONAL ORGANIZATIONS. KNOWI FDGEARI F ON THE APPLICATION OF COMBAT OPERATIONS AND DIRECTS THE EFFORTS OF SUPPORTING COMBAT ANALYST. INTERFACES WITH THE CJTF STAFF, CJFACC, COMAFFOR, THE AOC DIRECTOR, AND/OR OTHER SENIOR-LEVEL STAFF REGARDING ASSESSMENT AND ANALYSIS MATTERS. UTC IS TYPICALLY COMBINED WITH 2 OR MORE UTC 9ASC1. CAN BE USED TO AUGMENT UTCS 7FVX1 / 5. REQUIRED THAT 61S4 TASKED IN THIS UTC MUST HAVE SCIENTIFIC ANALYST BACKGROUND AS A 61S3A. 61S4 CAN BE SUBSTITUTED WITH 61S3A.



9ASC7 – Director Combat Analyses

■ Manpower: 1 AFSC: 061S4 Grade: O-6

MISCAP: THE DIRECTOR COMBAT ANALYSES (DCA) PROVIDES THE LEADERSHIP FOR A COMBAT ANALYST TEAM AND/OR IS THE INTERFACE WITH THEATER LEVEL OR OTHER SENIOR-LEVEL STAFF FOR QUANTITATIVE AND QUALITATIVE OPERATIONS ASSESSMENTS. EXPERIENCED IN ANALYZING A WIDE RANGE OF AIR FORCE, JOINT, AND COMBINED OPERATIONS. CAN OPERATE WITHIN THE AIR OPERATION CENTER (AOC), COMBINED JOINT TASK FORCE (CJTF), OR OTHER OPERATIONAL ORGANIZATIONS. KNOWLEDGEABLE ON THE APPLICATION OF COMBAT OPERATIONS AND DIRECTS THE EFFORTS OF SUPPORTING COMBAT ANALYST. INTERFACES WITH THE CJTF STAFF, CJFACC, COMAFFOR, THE AOC DIRECTOR, AND/OR OTHER SENIOR-LEVEL STAFF REGARDING ASSESSMENT AND ANALYSIS MATTERS. UTC IS TYPICALLY COMBINED WITH 1 UTC 9ASC5 AND 3 OR MORE UTC 9ASC1. CAN BE USED TO AUGMENT UTCS 7FVX1 / 5. REQUIRED THAT 61S4 TASKED IN THIS UTC MUST HAVE SCIENTIFIC ANALYST BACKGROUND AS A 61S3A. DESIRED JSO OR JSO NOMINEE.